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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,576	02/10/2004	Seppo Vesterinen	088245-0388	8892

23524 7590 12/23/2008

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EXAMINER	
KING, SIMON	

ART UNIT	PAPER NUMBER
2614	

MAIL DATE	DELIVERY MODE
12/23/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/774,576	VESTERINEN ET AL.	
	Examiner	Art Unit	
	SIMON KING	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 November 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see remarks, filed 11/3/2008, with respect to the rejection(s) of claim(s) 1-32 under Singhal et al. have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Koch et al. (US 2004/0042446 A1) and Reuss (US 2003/0165230 A1).

Claim Rejections - 35 USC § 112

2. Claim 15 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As for claim 15, the cited claim as "A network element comprising ……...identifier of the network element and the temporary." The phrase "the temporary" render claim 15 indefinite. Examiner will interpret the phrase as "the temporary address". Corrective action is required.

Allowable Subject Matter

3. Claims 5, 10, 19 and 24 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. As for claims 5 and 19, prior art fails to teach a method and network element, wherein the control module is configured to access the identifier of the network element without communicating with other network elements. As for claims 10 and 24, prior art fails to teach a method and network element,

further comprising blocking, inside the network element, all data packets that do not contain the identifier of the network element

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-3, 6-9, 11-13, 29, 30 and 31 rejected under 35 U.S.C. 102(e) as being anticipated by Koch et al. (US 2004/0042446 A1).

As for claim 1, discloses a method for configuring addresses in a packet switched data communication system (Abstract and Fig.2), the method comprising: configuring a temporary address for an interface of a sub-element of a network element ([0031]: PON interface 12 associates a DHCP obtained IP address for a client: [0032]: DHCP defines temporary address [0034]: PON interface 12 forwards the DHCP request forwards the DHCP request to the provisioned DHCP server 36 via the respective DHCP relay agent 36 of PON interface module 34), the network element comprising a control module (Fig. 2: DHCP RELAY AGENT 38A) and the sub-element ([0033]: Fig. 2, client node 28A); retrieving an identifier of the network element from the control module ([0034]: PON interface 12 uses the information to create a mapping between the unique information from the DHCP request, e.g., the MAC address of the client device); and defining a second address for the interface of the sub-element based on the retrieved

identifier of the network element and the temporary address ([0035]: PON 12 determines the appropriate PON interface module 34 for forwarding the packet using the mapping that associates the MAC address of the client device with a respective PON interface module 34) (From applicant's specification, paragraph [0009]: "In an IP network each node, including hosts and routers, has an address, which is unique for the element…..". This clearly states that an element can be a network node. From Koch's prior art, Fig. 2 shows a PON 12 interface which is merely an element in a network. Client node 28 also is an element in the same network. Combine PON interface 12 and node 28 would form an element for the PON network)

As for claim 2, Koch discloses a method according, wherein the temporary address is a local link layer address for the interface of the sub-element ([0028]: Ethernet interface).

As for claim 3, Koch discloses a method, wherein the temporary address for the interface of the sub-element is configured based on the position of the sub-element in the network element ([0020]).

As for claim 6, Koch discloses a method, wherein the control module is configured to store the identifier of the network element in a memory of the control module ([0023]).

As for claim 7, Koch discloses a method, further comprising verifying the uniqueness of the second address using a duplicate address detection process ([0032]:

DHP assign IP address on a define lease, duplicate address will not be assign).

As for claim 8, Koch discloses a method, wherein the identifier of the network element is retrieved from the control module using the temporary address as a unique address to carry out an automatic address resolution procedure locally in the network element ([0033]).

As for claim 9, Koch discloses a method, wherein the defined second address comprises a network layer address for the interface of the sub-element ([0031]: IP address).

As for claim 11, Koch discloses a method, further comprising enabling the interface of the sub-element for network element external communication after the second address for the interface of the sub-element is defined ([0037]).

As for claim 12, Koch discloses a method, further comprising retrieving a network portion identifying a logical network ([0022] and [0033]: LAN) including the network portion with the second address of the interface of the sub-element ([0036-0037]: forward address with IP subnet).

As for claim 13, Koch discloses a method, wherein the logical network is a layer 2 switched local area network with at least two network elements ([0033]: LAN segment attached to Ethernet device. Fig.2 shows more that one Node 1.....Node N, 28 A...28B).

As for claim 29, Koch discloses a communication system (Fig.2) comprising: a logical network comprising at least two network elements (Fig.2 and [0022]: local area network (LAN) and multiple NODEs 28), a network element of the at least two network elements comprising at least one sub-element and a control module; a configuring means for configuring a temporary address for an interface of a sub-element of the at least one sub.element and to define an address for the interface of the sub-element based on an identifier of the network element retrieved by a retrieving means from the control module and the temporary address (see rejection for claim 1).

As for claim 30, Koch discloses a communication system, wherein the defined address further comprises a network portion identifying the logical network ([0033]: DHCP client wants to obtain an IP address, it broadcasts a DHCP request on a corresponding LAN segment that is attached to the Ethernet device of the respective network node 28).

As for claim 31, Koch discloses a communication system, wherein the defined address comprises one of a link-local Internet Protocol version 6 address based on an EUI-64 identifier and an Internet Protocol version 4 address using a dynamic host configuration protocol ([0022]: Ipv4: [0024]: DHCP).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to

> be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 4, 14-18, 20-23, 25-28 and 32 rejected under 35 U.S.C. 103(a) as being unpatentable over Koch et al. (US 2004/0042446 A1) in view of Reuss (US 2003/0165230 A1).

As for claim 4, Koch discloses a method, wherein the temporary address for the interface of the sub-element. Koch discloses the claimed invention except where configured based on a serial number of the sub-element.

However, Reuss discloses configured based on a serial number of the sub-element for the purpose of identification on the network (Reuss: Fig.2A and [0009]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement configured based on a serial number of the sub-element for the purpose of identification on the network as taught by Reuss in Koch for the purpose of identification on the network.

As for claim 14, Koch discloses the claimed invention except where a computer program product comprising program code for performing the method, the program code embodied on a computer- readable memory and executable by a processor of the network element.

However, Reuss discloses where a computer program product comprising program code for performing the method, the program code embodied on a computer-readable memory and executable by a processor of the network element (Reuss: [0035] and Fig. 2A: call center asset is a node within a network) for the purpose of enablement.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to configure where a computer program product comprising program code for performing the method, the program code embodied on a computer-readable memory and executable by a processor of the network element as taught by Reuss in Koch for the purpose of enablement.

As for claim 15, Koch discloses a network element comprising: a sub-element; a control module; comprising: configuring a temporary address for an interface of the sub-element; retrieving an identifier of the network element from the control module; and defining a second address for the interface of the sub-element based on the retrieved identifier of the network element and the temporary (see rejection for claim 1). Koch discloses the claimed invention except a processor; and a computer-readable memory operably coupled to the processor, the computer- readable memory comprising instructions that, upon execution by the processsor, perform operations for the claimed invention.

However, Reuss discloses where a processor; and a computer-readable memory operably coupled to the processor, the computer- readable memory comprising instructions that, upon execution by the processor (Reuss: Reuss: [0035] and Fig. 2A: call center asset is a node within a network) for the purpose of enablement.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement a processor; and a computer-readable memory operably coupled to the processor, the computer- readable memory comprising instructions that, upon execution by the processor as taught by Reuss in Koch for the purpose of enablement.

As for claim 16, Koch in view of Reuss discloses a network element, wherein the temporary address is a local link layer address for the interface of the sub-element (see rejection for claim 2)

As for claim 17, Koch in view of Reuss discloses a network element, wherein the temporary address is configured based on the position of the sub-element in the network element (see rejection for claim 3).

As for claim 18, Koch in view of Reuss discloses a network element, wherein the temporary address is configured based on a serial number of the sub-element (see rejection for claim 4).

As for claim 20, Koch in view of Reuss discloses a network element, wherein the control module is configured to store the identifier of the network element (see rejection for claim 6).

As for claim 21, Koch in view of Reuss discloses a network element, wherein the operations further comprise verifying the uniqueness of the second address using a duplicate address detection process (see rejection for claim 7).

As for claim 22, Koch in view of Reuss discloses a network element, wherein the identifier is retrieved from the control module of the network element Using the temporary address as a unique address to carry out an automatic address resolution procedure locally in the network element (see rejection for claim 8).

As for claim 23, Koch in view of Reuss discloses a network element, wherein the defined second address comprises a network layer address for the interface of the sub-element (see rejection for claim 9).

As for claim 25, Koch in view of Reuss discloses a network element, wherein the operations further comprise retrieving a network portion identifying a logical network and including the network portion with the second address of the interface of the sub-element (see rejection for claim 12).

As for claims 26 and 32, Koch discloses a network element and communication system for the claimed invention. Koch discloses the claimed invention except where the local link layer address (Koch: [0028]: Ethernet interface) is based on a 48-bit media access control identifier format.

However, Reuss discloses a 48-bit media access control identifier format for the purpose of preventing duplicate of same MAC-48 address on another device (Reuss: [0049-0051]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement a 48-bit media access control identifier format as taught by Reuss in Koch for the purpose of preventing duplicate of same MAC-48 address on another device.

As for claim 27, Koch in view of Reuss discloses a network element, wherein the network layer address is one of a link-local Internet Protocol version 6 address based on an EUI-64 identifier and an Internet Protocol version 4 address using a dynamic host configuration protocol (Koch: [0022]: Ipv4: [0024]: DHCP).

As for claim 28, Koch in view of Reuss discloses a network element, wherein the network element is a transceiver (Koch: Fig.2: network node 28 is an element inside a PON (passive optical network, inherent that a transceiver is present in order to transmit and receive optical signals).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SIMON KING whose telephone number is (571)270-1950. The examiner can normally be reached on 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, FAN TSANG can be reached on (571)272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

16 December 2008

/SIMON KING/
Examiner, Art Unit 2614

/Fan Tsang/
Supervisory Patent Examiner, Art Unit 2614